03/25/2006 22:38 7135793055 KEELING LAW FIRM PAGE 05/10

Confirmation No. 7619

Appl. No. Applicants 10/619,842

Strom W. Smith

Filed TC/A.U. July 15, 2003

Examiner :
Docket No. :
Customer No. :

1764 Tom Duong 141.015

9809

REMARKS

Reconsideration of the application in view of this Amendment and the following remarks is respectfully requested. This Amendment cancels claims 1-8 and 14-18, and adds new claim 19. Claims 9-13 and 19 are therefore now pending in this application.

In the Office Action dated February 17, 2006, claims 1-18 were again rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,498,270 to Smith in view of U.S. Patent No. 1,448,972 to Long. Applicant respectfully traverses this rejection as to claims 9-13 and submits that new claim 19 is also unobvious over Smith in view of Long.

<u>Claims 9-13</u>

It is apparent from the Office Action that the Examiner misconstrues Applicant's argument regarding claim 9 that there is no suggestion or motivation to combine the cited references as suggested by the Examiner. See p. 9-10 of 12/6/05 Response. The Applicant first shows that Smith teaches away from Long because Smith teaches a spherical float and valve that seals at any orientation, whereas Long teaches a valve seat located at the bottom center of a float, that seals in only one orientation of the float. The Applicant then shows that Long teaches away from Smith because Long teaches using an upper guide stem 12 to limit movement of his float 10 to only vertical movement, whereas Smith teaches a float that is free to move horizontally and to rotate, as well as to move vertically.

The Examiner misconstrues this second point as saying that modifying Smith with Long would limit vertical movement of the float:

Appl. No.
Applicants

10/619,842

Confirmation No. 7619

Filed TC/A.U. Strom W. Smith July 15, 2003

Examiner
Docket No.
Customer No.

1764 Tom Duong 141.015 9809

Applicant argued the modification of Smith with the Long teaching reference imposes limitations to vertical movement. Examiner respectfully disagrees. Smith discloses a float (26) which is free to move up and down in vertical direction in the interior surface of cylindrical wall (12) as shown in Figure 1 and the modification of Smith by adding the counterweight (11) and cleaning rod (13) of Long does not restrict the vertical movement of Smith's float (26).

Office Action at page 4, Response to Arguments, bottom.

Applicant actually argues just the opposite. He shows that Long's teaching the use of upper and lower guide stems *limits horizontal and rotational movement* of the float, and restrains the float to *only* vertical movement.

In addition, Long does not teach the use of a counterweight on a float for orienting the float with respect to a valve seat, since he teaches using upper and lower guide stems to keep his float oriented. A point of novelty in the present invention is that Applicant's counterweight 110 maintains his float 26 in the proper orientation relative to the valve seat on cylindrical member 22, with the counterweight 110 centered below float 26. Specification at page 9, lines 19-21. The Examiner misconstrues Long's valve 11 on the bottom of his float 10 as a "counterweight," when valve 11 does not serve that purpose at all.

The Examiner states that it would be obvious in view of Long to one of ordinary skill in the art to modify the sealing device of Smith with a counterweight engaged with the float in order to facilitate in opening and closing of the condensate discharge passage. However, the combination proposed by the Examiner falls short of meeting the requirements of Claim 9. Claim 9 requires "said counterweight having a beveled peripheral surface and a lower surface; ... said counterweight lower surface at least partially arcuate." By contrast, neither Smith nor Long discloses a counterweight having a beveled peripheral surface and a lower surface, the lower

Appl. No.
Applicants

10/619,842

Confirmation No. 7619

Filed

Strom W. Smith July 15, 2003

TC/A.U. Examiner Docket No. 1764 Tom Duong 141.015

Customer No.

9809

surface being at least partially arcuate, as required by claim 9. Instead, Long discloses a float having at its bottom a valve 14 with a beveled peripheral surface. Smith discloses only a spherical float. Smith discloses no counterweight at all, much less a counterweight having a beveled peripheral surface and an attached lower surface.

The advantage attained by Applicant's arcuate lower surface is that it facilitates the centering of the counterweight (110) in the cylindrical member (22). See the patent application at Figure 1 and page 6, lines 16-17 and page 10, lines 8-9 of the specification. The lower surface portion of the counterweight also scrapes the top inner portion of the cylindrical member (22) when the counterweight is seated on the cylindrical member. See the application at Figure 2 and page 10, lines 3-4 of the specification. Because neither Smith nor Long satisfies the above-quoted requirement of claim 9, this claim requirement would also be lacking from any combination of Smith and Long. Hence, Applicant's claim 9 is patentably distinct from the proposed combination of Smith and Long.

Claims 10-13

Claims 10-13 depend directly or indirectly from, and contain all the limitations of, claim 9. In addition, claim 11 requires "said lower surface below said beveled peripheral surface; said lower surface extending inside said cylinder in said float floating position", which is not disclosed by Smith or Long. Therefore, claims 10-13 are also patentably distinct from Smith and Long for the reasons stated above with respect to claim 9.

Appl. No. Applicants 10/619,842

Strom W. Smith July 15, 2003

Filed TC/A.U.

1764

Examiner
Docket No.
Customer No.

Tom Duong 141.015 9809

New Claim 19

The combination of Smith and Long proposed by the Examiner also falls short of meeting the requirements of new claim 19. Claim 19 requires:

"a counterweight attached to said float, said counterweight having a beveled peripheral surface and a lower extension below said beveled peripheral surface;

Confirmation No. 7619

said counterweight constructed to sealingly engage said upper edge in a float first position, said lower extension extending inside said hollow cylinder in said float first position;"

By contrast, neither Smith nor Long discloses a counterweight having a beveled peripheral surface and a lower extension below said beveled peripheral surface, whereby the lower extension extends inside a hollow cylinder in a float first position, as required by claim 19. Instead, Long discloses a float having at its bottom a valve 14 with a beveled peripheral surface. Smith discloses a spherical float, but no counterweight having a beveled peripheral surface or attached lower extension at all.

The advantage attained by Applicant's lower extension is that it facilitates the centering of the counterweight (110) in the cylindrical member (22). See the patent application at Figure 1 and page 6, lines 16-17 and page 10, lines 8-9 of the specification. The lower surface portion of the counterweight also scrapes the top inner portion of the cylindrical member (22) when the counterweight is seated on the cylindrical member. See the application at Figure 2 and page 10, lines 3-4 of the specification. Because neither Smith nor Long satisfies the above-quoted requirement of new claim 19, this claim requirement would also be lacking from any

. 03/26/2006 22:38 7135793055 KEELING LAW FIRM PAGE 09/10

Confirmation No. 7619

Appl. No. Applicants 10/619,842

Strom W. Smith

Filed TC/A.U. Examiner

July 15, 2003 1764

Examiner
Docket No.
Customer No.

Tom Duong 141.015 9809

combination of Smith and Long. Hence, Applicant's new claim 19 is patentably distinct from the proposed combination of Smith and Long.

In addition, Applicant respectfully disagrees with the position taken by the Examiner that it would be obvious in view of Long to one of ordinary skill in the art to modify the sealing device of Smith with a counterweight engaged with the float in order to facilitate in opening and closing of the condensate discharge passage. The patent to Long was issued in 1920, well before Smith applied for his patent in 1994. Had it been obvious to modify Smith as suggested by the Examiner, then Smith, presumably one who was skilled in the art, would have done so. For the Examiner to conclude that the suggested modification of Smith would have been obvious in view of Long is to rely on the impermissible utilization of hindsight gained from the Applicant's own disclosure. This, of course, is improper in any determination under 35 U.S.C. §103.

Applicant respectfully requests that the Examiner call Applicant's attorney at 713-579-3024 to discuss this Amendment and Response.

Applicant has made an earnest attempt to place this application in condition for allowance. For the foregoing reasons, and for other reasons clearly apparent, Applicant respectfully requests full allowance of claims 9-13 and 19 now pending in the application. Reconsideration of the application and its early allowance are therefore requested.

The Commissioner is hereby authorized to charge any fees or credit any overpayments to Deposit Account No. 11-0307.

Appl. No.

10/619,842

Applicants : Strom W. Smir Filed : July 15, 2003

TC/A.U. : 1764

Examiner : Tom Duong

Docket No. : 141.015

Customer No. : 9809

Strom W. Smith

Confirmation No. 7619

Respectfully submitted,

Kenneth A. Keeling Registration No. 31,842

Keeling Patents and Trademarks 3310 Katy Freeway, Suite 100 Houston, Texas 77007 (713) 579-3001 (713) 579-3002 Fax